Hi-tex®

Composite Proved Efficiency

ENDO IP
Dual-side mesh for intraperitoneal placement - 0.5 mm thick

PARP MP
Dual-side mesh for intraperitoneal placement - 1 mm thick

PARP MP3
Dual-side mesh for intraperitoneal placement - 1.5 mm thick
Experimental study with 18 rabbits. A wound was created in each rabbit in aponeurose, muscle and peritoneal abdominal wall. An Hi-Tex® dual-side mesh was then implanted in intraperitoneal situation and removed at 4, 9 and 13 months for electronic microscopy examination and histological analysis:
- No local sepsis observed (serome, infection…)
- All meshes were found intact and well integrated
- No adhesion observed on 15 rabbits: 82% of cases
- After 13 months implantation, PEU sides are completely colonized. Their structure consists of thick fibrous cords, reminiscent of non inflammatory fibroblast cells
- The mesh center is often colonized by a connective tissue, highly vascularized
- Nothing wrong against PEU biocompatibility & stability.

Electronic microscopy pictures at 13 months.
The mesh features a well-orientated continuous fibrocellular coating.
The PEU structure consists of thick fibrous cords, reminiscent of fibroblast cells.

Experimental study to evaluate the biocompatibility and tissular ingrowth of Hi-Tex® wall reinforcement dual-side meshes, following implantation with pig.
Each of the 5 animals received 3 perforated meshes coated with polyurethane for 8, 18, 24 or 32-week periods:
- No signs of degradation of the PEU coating observed
- Good tissular ingrowth
- Low inflammatory response.

PIG

- Picture of the prosthesis at 18 weeks.
- Tissular ingrowth & neovascularization.
- Histological view at 24 weeks (x4).
- Low inflammatory reaction.
- Histological view at 32 weeks (x4).
- Tissular ingrowth and low inflammatory reaction (perforation area).

Electronic microscopy pictures - PEU side.
The polyurethane side is covered with a film of macrophagic peritoneal cells.
Histological view - PEU side (10x1.25). The fibrous tissue is well organized, orientated and shows vascular islands surrounded by lymphocitic elements.
Histological view - PET side (10x1.25). Complete colonization of the PET side by fibrous tissue in a collagen and cellular network.

HUMAN

Electronic microscopy examination and histological analysis of an Hi-Tex® dual-side mesh after 4 months human implantation.

COMPOSITE PROVED EFFICIENCY
**ENDO IP** (120 g/m²)
Dual-side mesh for intraperitoneal placement

**INDICATIONS**
- Designed for intraperitoneal placement
- Treatment of eventration and umbilical hernias
- Specially adapted for use in celioscopy

**FEATURES**
- 0.5 mm-thick composite structure
- Multifilaments of polyester (polyethylene terephthalate) PET, coated on one side with a thin membrane of aliphatic polyurethane, poly(ether urethane) PEU
- Pre-cut and entirely macro-perforated prosthesis

**PARP MP** (160 g/m²)
Dual-side mesh for intraperitoneal placement

**INDICATIONS**
- Designed for intraperitoneal placement
- Treatment of eventration and umbilical hernias
- Adapted to celioscopy or laparotomy

**FEATURES**
- 1 mm-thick composite structure
- Multifilaments of polyester (polyethylene terephthalate) PET, coated on one side with a thin membrane of aliphatic polyurethane, poly(ether urethane) PEU
- Pre-cut and entirely macro-perforated prosthesis

**PARP MP3** (210 g/m²)
Dual-side mesh for intraperitoneal placement

**INDICATIONS**
- Designed for intraperitoneal placement
- Treatment of eventration and umbilical hernias
- Especially adapted to laparotomy

**FEATURES**
- 1.5 mm-thick 3D “honey comb” structure
- Multifilaments of polyester (polyethylene terephthalate) PET, coated on one side with a thin membrane of aliphatic polyurethane, poly(ether urethane) PEU
- Pre-cut and entirely macro-perforated prosthesis
- Excellent multidirectional elasticity

**ADVANTAGES**
- 1st dual-side mesh on the market for intraperitoneal placement
- 10 years human clinical experience
- A macroperforated structure featuring 2 distinct sides:
  - A permeable peritoneal side in polyester for good fibroblast colonisation and rapid tissue fixation (white side)
  - A non absorbable and non adherent smooth side in polyurethane allowing fluid transfer and contact with viscera (blue side)
- No viral contamination risk (100% artificial materials)
- Visual mark printed on textile side to easy mesh centering and positionning
- Excellent multidirectional mechanical properties and resistance to tearing
- Ready for use prosthesis, with no preparation before implantation (minimum spectral risks)
- A complete range offering size and thickness variety to answer all surgical needs
**BIBLIOGRAPHY**


